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# State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF WATER QUALITY

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Reply to: State of Utah  
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Department of Environmental Quality  
Salt Lake City, Utah 84114-4870

ACT/005/007  
FOLDER #7  
#2

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February 28, 1992

Mr. Ken Phippen  
Department of Natural Resources  
455 West Railroad Ave.  
Price, UT 84501

RECEIVED

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DIVISION OF  
OIL GAS & MINING

RE: Impact of Skyline Mine on Eccles Creek;  
UPDES Permit No. UT0023540

Dear Mr. Phippen:

Skyline Mine has had trouble meeting the total dissolved solids (TDS) effluent limit given in their permit during the past two years. When their permit was renewed in September 1990, their permit limit for TDS was raised from 700 mg/L to 1000 mg/L. They have been discharging about 1400 mg/L, a flow that constitutes roughly half of the Eccles Creek flow. Their TDS problem seems to stem from the use of gypsum rock dust they have used to line walls and floor of areas mined in the past. Rock dust is used in mines after an area has been mined to moderate the explosive coal dust present after mining. Skyline has found that gypsum rock dust has a sulfate component that dissolves when exposed to mine water. They have discontinued their use of gypsum rock dust, but the rock dust presently in the mine is continuing to cause problems with their TDS limit.

Eccles Creek is classified as 1C (protected for domestic uses with prior treatment), 3A (protected for cold water game fish), and 4 (protected for agriculture). In the Standards of Quality for Waters of the State (UAC R317-2) for classification 1C the TDS limit may be adjusted on a case-by-case basis, there is no TDS standard for a class 3A water, and the limit for a class 4 water is 1200 mg/L. My question is, does Skyline's TDS exceedence have a significant effect on the 3C classification of Eccles Creek? Does the discharge exceeding the TDS effluent limit effect the trout fishery, other cold water aquatic life or the food chain of these animals? The stream standards do not set forth a clear gauge that shows when a stream has been negatively impacted by TDS concentrations. May I receive your comments to this question? Maybe I need to have Skyline do more investigation on their impact to the stream. An answer to this question will have an effect on how we deal with Skyline's TDS exceedence. If Skyline has had a significant impact we will pursue an enforcement course that will include reparation of the damage caused to the stream. If Skyline has not had a significant impact on the stream we may allow this

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excedence until they can flush out the TDS problem (this assumes Skyline has not impinged stream standards for the two other water use classes).

Enclosed is a report prepared for Skyline by Ecosystems Research Institute. This may help answer some of the questions you may have. We hope to get an opinion from Natural Resources to help us determine how to deal with this issue.

If you have any questions my number is 538-6146.

Sincerely,



Harry Campbell, Environmental Engineer  
Permitting & Compliance Section

Enclosure

HC:hc/st

cc: Priscilla Burton, Division of Oil Gas and Mining

S:PHIP.LTR  
FILE:NPDES